

ABSTRACT OF THE DISCLOSURE

A channel estimation method for a digital telecommunication station is disclosed. A frequency correction burst is sought by scanning of the wanted channel. The frequency correction burst is used to provide coarse time and frequency synchronizations. A synchronization burst is received. Calculating the cross-correlation of the expected training sequence with the training sequence contained in said synchronous burst to obtain a channel estimate. A frequency error estimate is derived from the channel estimate, and the frequency error of the received burst is corrected in accordance with said frequency error estimate. The received synchronous burst is equalized. The frequency corrected symbols are used to refine the time and frequency synchronizations.